

MEMORANDUM

DATE:	May 2 nd , 2016
FROM:	Eric Lancaster
SUBJECT:	Weekly Progress Report @ Gold King
TO:	Steven Way

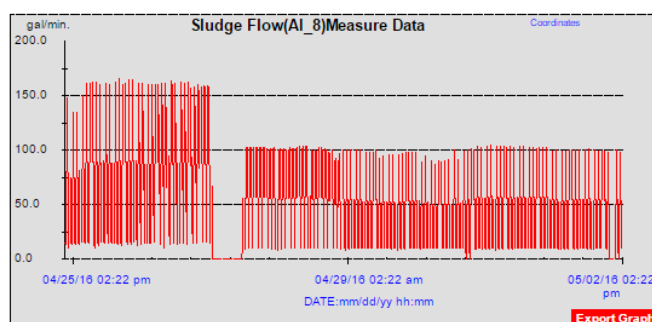
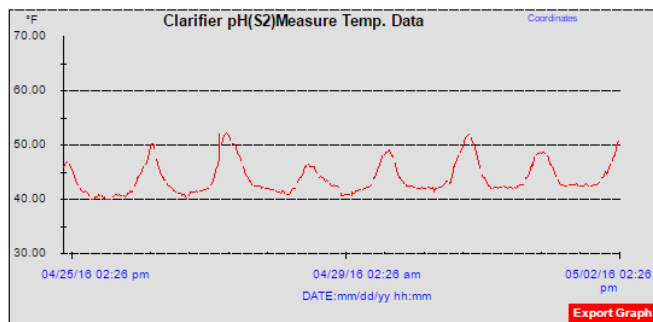
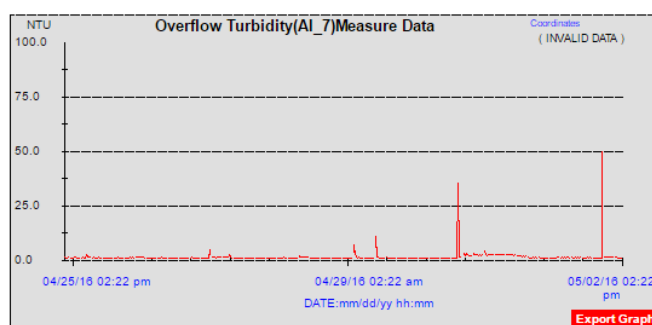
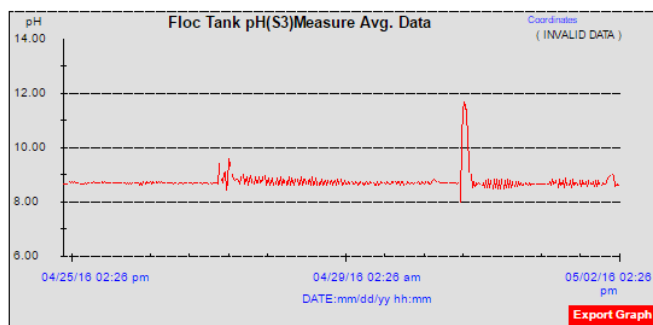
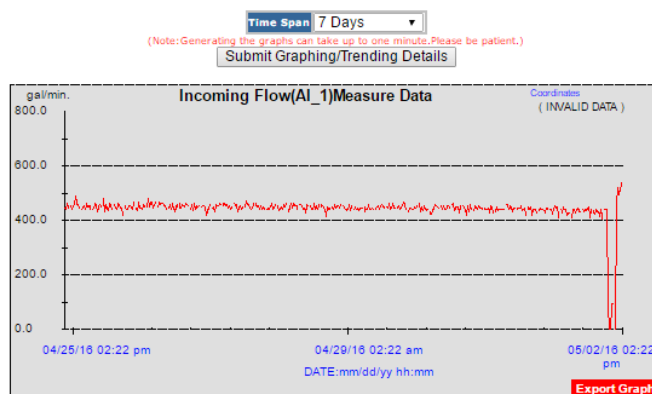
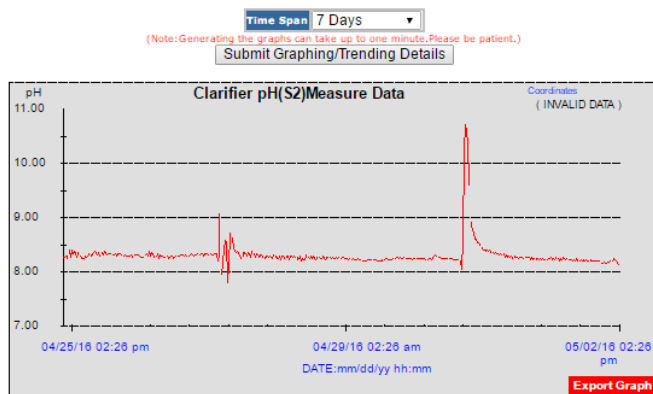
Project: Gold King Interim Water Treatment Plant (IWTP)
Location: Gladstone, Colorado
Prepared for: Emergency Response Unit – US EPA Region 8

Reporting Period: Apr 25 – May 2
Report No.: 19

I. General Operations Summary:

IWTS Function/Upsets

- The following graphs provide trending information during the previous 7 days. The dataloggers collect control information from the Lime Circuit (left) and Flow Circuit (right) Programmable Logic Controllers (PLCs) at the Gold King IWTP. Over the reporting period (4/25/16 – 5/2/16 inclusive) Alexco treated 4.38 million gallons at an average flow rate of 435 gpm with all discharged treated water leaving the 12" HDPE pipeline.



- Please note: Several days each week, the Alexco operators check the pH at both the flocculation tank and clarifier discharge. During this time, the probe is placed in vinegar (acid), and three pH buffers – 4, 7, and 10. While the probe is in the acid/buffer, the datalogger may capture one of those points for tracking purposes, which explains the occasional pH spikes seen on the graph.
- On 4/30, the Alexco operator transferred lime from the horizontal silo to the vertical silo. Normally, the Vibrascrew Feeder is turned-off at that time because pressure within the vertical silo forces additional hydrated lime powder into the lime slurry tank. This did happen and a thick batch of lime slurry was made. This caused the peristaltic pumps to overshoot temporarily and caused a short spike in pH.
- On 5/2, the Alexco operator closed the incoming butterfly valves and slowed flow to roughly 100 gpm. This was done during the electrical upgrade, when devices were removed from one panel and connected to the new panel.

Communication System Function Status

- No issues – reliable operations during the reporting period.

Facility or System Related Work, including Repairs & Completions

- **Electrical Upgrades** – Alexco's selected electrical contractor (Rapid Energy) began electrical upgrades on Friday, April 15th. These improvements will allow the IWTP to pass a final electrical inspection by the State Inspector. That final inspection is scheduled for Wednesday, May 4th.

II. Identified Problems, Causes, and Solutions (Planned or Implemented)

- **Spring Melt Contingency Updates:**
 - **Second Clarifier** – Alexco has received written notice to move forward with the installation/operation of a rental clarifier and supporting infrastructure required for spring melt. Alexco is targeting operation of this expanded system by May 10th.
 - **Additional Bags** – Alexco has additional textile bags (2X 125' x 45 and 1X 90' x 45') located at site that can contain an additional 2,000 CY of sludge. Alexco is able to install one or two of these additional textile bags as needed during spring melt.

III. System Inspections – Specific elements inspected and finding

- N/A

IV. Site Status

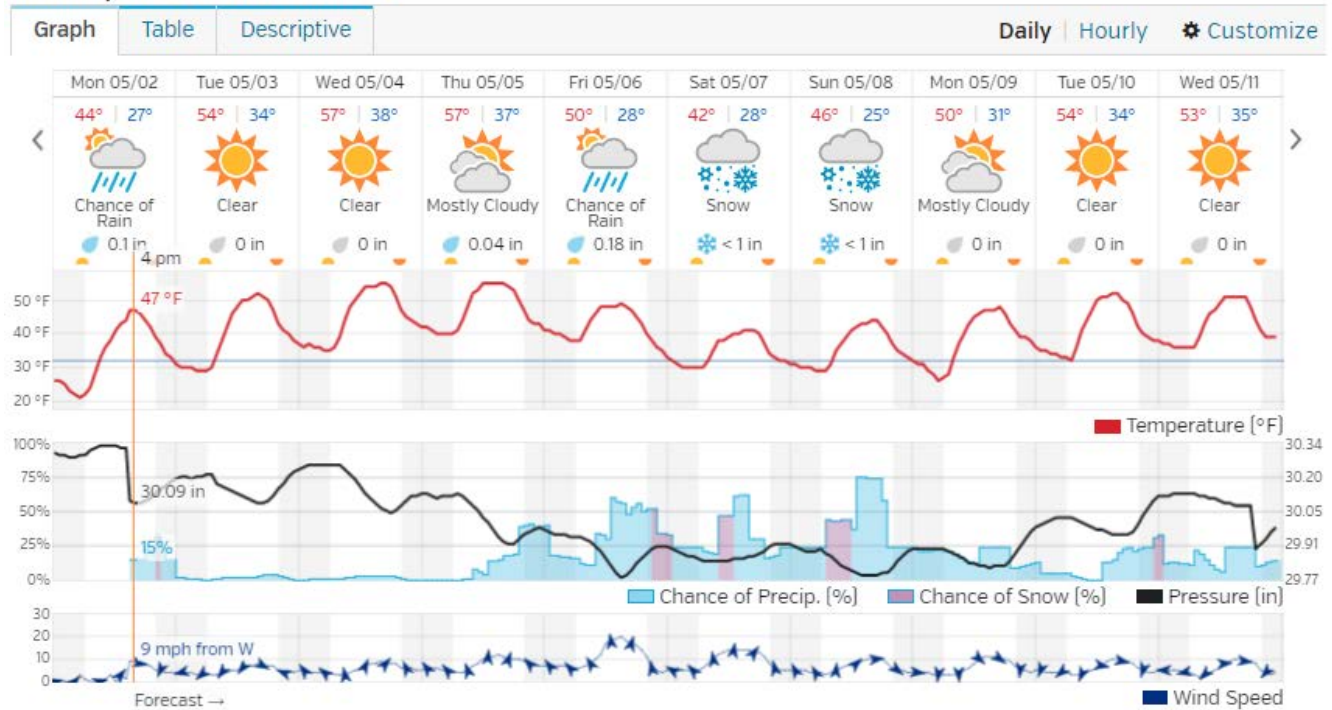
Personnel and equipment onsite

- Alexco currently employs one full-time employee (FTE) who lives in Silverton and oversees all operations at the Gold King IWTP. He is supported by remote operators in Denver, and local sub-contractors as needed.

Weather conditions

- Weather Underground Report for Silverton, CO (5/2/2016 – 5/11/2016)

10-Day Weather Forecast



Site Images



Photo 1: Site from the road near the IWTP discharge pipe – Taken on 4/26/2016



Photo 2: Preparing the pour for the 2nd clarifier – Taken on 4/26/2016



Photo 3: Upgrades to the electrical system for the upcoming inspection – Taken on 4/26/2016



Photo 4: Cable tray installed over the door and throughout the building – Taken on 4/26/2016